

### **REMARKS**

The applicants have carefully considered the Office action dated December 29, 2006 and the references it cites. In the Office action, independent claims 1-26 were rejected under 35 U.S.C. § 101 as directed to non-statutory subject matter and claims 1 and 14 were rejected under 35 U.S.C. § 102 as anticipated by Cornelius (US 6,684,222)

#### **Rejections Under 35 U.S.C. § 101**

As an initial matter, applicants have amended claims 1 and 14 to include forwarding the converted message to the associated database. The claims as amended are more than abstraction and produce tangible result for at least the reason that the converted message is brought out of the processor and is forwarded to a database. Therefore, the applicants respectfully submit that claims 1 and 14 and all claims depending therefrom are directed to statutory subject matter.

#### **Rejections Under 35 U.S.C. § 102**

The applicants respectfully submit that claim 1 is patentable over the Cornelius. The contentions stated in the Response to Arguments section of the Office action are discussed below.

**The general assertion that Cornelius is analogous to the applicant's invention (see Office action, Page 14-16).**

The Office action states "Cornelius is analogous to the applicant's [invention] as providing [a] database including entities for storing XML file, or XML message in order to recover lost message." The applicants do not dispute that Cornelius and the present invention include some similarities. For example, both Cornelius and the present invention provide methods for storing and organizing hierarchical data (e.g., XML message information) in a database. However, the present invention, as clarified in the forgoing amendments to the

claims includes the additional capability of determining an appropriate database for storage based on the XML tags in a received XML message. For example, the specification describes that the XML tags of an incoming message may be compared to a list of references representing the names of all customers having messages stored within a plurality of databases. (Paragraph [0008]). If a match between an XML tag and a name on the list is located, the incoming message will be stored in the database in which the matched name is already stored or with which the name is otherwise associated. Because different databases may be associated with different data formats, the message will be converted to the format associated with the selected database. Accordingly, the present invention facilitates the organization of data in a multiple database system. Even if Cornelius could include multiple databases, a point that the applicants do not concede, Cornelius does not describe or suggest a method for automatically selecting an appropriate database for storage of message information.

**The assertion that Cornelius describes comparing one or more XML tags within at least one XML-based message to one or more references, wherein each reference is associated with one or more previous messages (Page 12, argument (a)).**

The Office action asserts that Cornelius describes comparing one or more XML tags within at least one XML-based message to one or more references, wherein each reference is associated with one or more previous messages in FIG. 2 and the description associated with FIG. 2. In particular, the Office action contends that S14 of FIG. 2 describes references associated with one or more previous messages and XML tags and S16 describes comparing the references. The applicants respectfully submit that, for the forgoing reasons, Cornelius is deficient.

Block S14 in FIG. 2 of Cornelius describes determining data attributes associated with corresponding structured data elements of a received hierarchical textual file. In other

words, Cornelius describes examining the hierarchical textual file parent node identifiers and object component identifiers to determine the data attributes of the hierarchical textual file message. The structured data elements (e.g., XML tags) of the hierarchical textual file message are in the hierarchical textual file itself, so they cannot be references associated with one or more previous messages. Accordingly, based on the contentions in the Office action, the data attributes must be the references associated with one or more previous messages.

The Office action states:

It is noted that “each references is associated with one or more previous messages” of claim 1 equates to “attributes in the tables” of Cornelius. It also is noted that attributes (references in claim 1) already stored in the table are attributes of the previous message (one or more references, wherein each preference is associated with one or more previous messages of claim 1).

(Page 15, lines 11-15). However, the applicants respectfully submit that Cornelius does not describe or suggest comparing the data attributes in the received hierarchical textual file to attributes stored in the table, as suggested in the Office action. Rather, Cornelius describes determining data attributes directly from the hierarchical textual file for storage in the table.

In step S14, the data processing system (102 or 120) determines the data attributes associated with corresponding structured data elements of the received hierarchical textual file. To this end, the data processing system (102 or 120) reads the data elements of the accepted hierarchical textual file on an element-by-element basis to determine the values for filling the data attribute fields of particular data elements.

(Col. 7, lines 9-15). In other words, Cornelius parses through the received hierarchical textual file to locate data for storage in a table. There would be no need for Cornelius to compare the elements in the hierarchical textual file to any other data (e.g., references associated with previous messages), because the hierarchical textual file (e.g., an XML file) includes parent node identifiers, reference hierarchical level identifiers, and object component

identifiers. In other words, the information necessary for extracting information from the hierarchical textual file is located in the hierarchical textual file itself.

Turning to block S16, the Office action alleges that the mapper of Cornelius teaches comparing and that the determined data attributes are references. However, the mapper of Cornelius does not compare the data extracted from the received hierarchical textual file (e.g., XML tags) to the data attributes because Cornelius indicates that the data extracted from the received hierarchical textual file are the data attributes. “The data attributes include hierarchical relationship data (e.g., node identifier and parent node identifier) for defining a hierarchical data structure among or between different data elements.” (Col. 18, lines 18-22). Accordingly, the data attributes are not the references associated with previous messages recited in claim 1.

The Office action argues, “[i]t should be noted that the step of comparing of claim 1 corresponds to the step of matching of data attributes as taught by Cornelius.” (Page 13, lines 1-2). However, even if matching data attributes to data attribute fields in the tabular data structure (e.g., described in S14 and S16) is comparing, neither the data attributes nor the data attribute fields in the tabular data structure are references associated with previous messages. As described above, the data attributes are not associated with previous messages because the data attributes are information extracted from the received hierarchical textual file. The data attribute fields in the tabular data structure are not references associated with previous messages. “[A] data processing system ... defines a generally tabular data structure having data attribute fields associated with corresponding data element fields. The data element fields may contain data element identifiers for distinguishing different data elements from each other.” (Col. 6, lines 33-37). “Data attribute fields 68 represent potential of actual characteristics of a corresponding data element.” (Col. 6, lines 44-45). Cornelius does not

describe or suggest (nor does the Office action point to such description or suggestion) that the data attribute fields are associated with previous messages.

Accordingly, as described above, Cornelius does not describe comparing one or more XML tags within at least one XML-based message to one or more references, wherein each reference is associated with one or more previous messages as recited in claim 1.

**The assertion that “parsing” described in Cornelius equates to “comparing” recited in claim 1 (Page 13, sub-argument a) of argument (b)).**

The Office action asserts that comparing is equivalent to “[p]arsed data[, which] includes symbols (e.g., characters) and markup code that provides a definition of the storage layout and logical structure of the XML document.” (Page 13, lines 9-11). Col. 3, lines 49-56, cited in the Office action, provide a general description of XML include parsed data. “Parsed data is made up of characters, some of which form character data, and some of which form markup.” (<http://www.w3.org/TR/REC-xml/>). While Cornelius describes parsed data, the portion of Cornelius cited in the Office action does not describe or suggest comparing the parsed data or even parsing the data. The mere existence of a parsed entity does not imply that Cornelius describes parsing the data. Further, even if Cornelius does suggest parsing the data, parsing data does not imply comparing one or more XML tags within at least one XML-based message to one or more references, wherein each reference is associated with one or more previous messages. As previously described, an XML message includes XML tags that allow the message to be parsed by examining the tags without the need for comparing the XML message to any previous information. In other words, an XML message is self-defined.

**The assertion that resending transaction data equates to comparing to one or more previous messages (Page 13, sub-argument b) of argument (b)).**

The Office action alleges that resending transaction data if an acknowledgment or confirmation of receipt is not received equates to the previous message of claim 1. (Page 13, line 18 – Page 14, line 8). However, even if the resent message equates to a previous message, a point that the applicants do not concede, Cornelius does not describe or suggest that the content of the resent message is compared with a received XML message or a reference associated with one or more previous messages, as recited in claim 1. The Office action points to the fact that the data is retrieved from the database for resending as describing “comparing.” (Page 14, lines 5-8). Even if the retrieving described by Cornelius is equivalent to “comparing” and the retrieved data is equivalent to the reference associated with a previous message of claim 1, points that the applicants do not concede, Cornelius does not describe retrieving based on one or more XML tags. Rather, by the time the message has been sent and is ready for re-sending, the hierarchical textual file has been converted to a table or other tabular structure (see, for example, FIG. 1, col. 4, line 63 – col. 5, lines 1-5). In addition, even if the data stored in the tabular structure is retrieved based on the hierarchical textual file and retrieving data from a database is “comparing,” points that the applicants do not concede, the retrieval is not a comparison of XML tags to a previous message. Rather, the retrieved data is for the same message, which is merely being re-sent.

**Summary**

In summary, as described above, Cornelius fails to describe or suggest all of the recitations of claim 1. While Cornelius and the present invention include some similarities, Cornelius does not describe or suggest the capability to determine a database associated with an XML message based on the contents of that message and to convert the data of the XML message to be compatible with the format of the determined database. In particular,

Cornelius does not describe or suggest comparing one or more XML tags within at least one XML-based message to one or more references, wherein each reference is associated with one or more previous messages. Accordingly, because Cornelius fails to describe all of the recitations of claim 1, claim 1 and all claims depending therefrom are in condition for allowance.

Claim 14 recites a system comprising, *inter alia*, a mediation web server operable to: receive at least one XML-based message from at least one of many, different communication devices; compare one or more XML tags within the message to one or more references, wherein each reference is associated with one or more previous messages; select a reference that most closely matches one or more of the XML tags, convert the received message into a format associated with at least one database associated with the matching reference, and cause the converted message to be stored in a first database when the reference is associated with the first database or a second database when the reference is associated with the second database. For at least the forgoing reasons provided in connection with claim 1, claim 14 and all claims depending therefrom are in condition for allowance.

If there are any remaining matters that the examiner would like to discuss, the examiner is invited to contact the undersigned representative at the telephone number set forth below.

Hanley, Flight & Zimmerman, LLC  
(at customer number **34431**)  
150 S. Wacker Dr.  
Suite 2100  
Chicago, Illinois 60606  
312.580.1020

Respectfully submitted,

/Michael W. Zimmerman/  
Michael W. Zimmerman  
Reg. No. 57,993  
Agent for Applicants

Dated: March 29, 2007